## Utah Division of Solid and Hazardous Waste

## SOLITUDE LANDFILL

## RESPONSE TO COMMENTS

A public comment period on the draft solid waste Class V permit for the proposed Solitude Landfill east of Green River, Utah was held from May 13 to June 11, 2003. A public hearing was held in Green River on May 29, 2003. This document summarizes and responds to the comments received. Comments have been paraphrased and grouped by related topics. Specific comments can be viewed at the Division office during normal business hours. Several comments in favor of the proposed landfill were received; no response to those comments is provided in this document.

**Comment:** Citizens of Green River don't know the "income structure," i.e. how much money the landfill owners will be paying to Green River City out of revenue generated from operation of the landfill. It appears that money paid to the City by the landfill owners is inadequate; the landfill owners are not paying the City enough money up-front to police the landfill. Green River residents are uninformed regarding the landfill.

**Response:** The financial arrangements between Green River Landfill and Green River City are outside the authority of the Solid Waste Permitting and Management Rules and the draft solid waste permit. The Solid and Hazardous Waste Control Board and the Division of Solid and Hazardous Waste have no regulatory authority over contracts between municipalities and disposal facilities, nor does the Division have any jurisdiction over the relationship between Green River City and its residents. The Division encourages city residents to discuss this issue with city officials.

**Comment:** The landfill will provide few jobs. The presence of the landfill will make property in Green River difficult to sell. The landfill site is visible from the interstate. Operation of the landfill will result in lots of truck traffic.

**Response:** Similar comments were received during the November 2002 public comment period for the Class I solid waste permit. Such impacts are beyond the authority of the Solid Waste Permitting and Management Rules ("the rules") and the authority of the Solid and Hazardous Waste Control Board as granted by the Solid and Hazardous Waste Act (19-6-101 et seq., Utah Code Annotated UCA)). The importance of such issues is a local consideration and should be part of the local decision-making process.

**Comment:** The commenter would like "baseline" studies done for air quality, specifically foreign particulates and gases that are not indigenous to the valley at this time that may be generated by the landfill.

**Response**: This comment was addressed in the April, 2003 Response to Comments document prepared after the public comment period for the Class I solid waste permit. New air emission

sources are regulated by the Division of Air Quality. Landfills are required to report design capacity and rate of waste acceptance. Since the design capacity of the Solitude Landfill exceeds 2.5 million megagrams (approximately 2.75 million tons), the owner will be required to calculate non-methane organic compounds emission and may be required to install a gas collection system. All landfills in the state receiving more than 20 tons a day of municipal waste also are required to monitor methane concentrations on a quarterly basis. The Division of Air Quality has been notified that the Solitude Landfill permit application is in the process of review in order to evaluate the applicability of air quality standards and requirements.

Also, Green River City may conduct or require the landfill owner to conduct additional air monitoring, including an assessment of air quality before the landfill begins receiving waste.

**Comment**: The proposed landfill is adjacent to Browns Wash, which will receive run-off or leachate from the landfill. Brown's Wash conveys a great deal of water when its drainage area receives a moderate rainfall, and could wash out the landfill.

**Response**: This comment was addressed in the April, 2003 Response to Comments document prepared after the public comment period for the Class I solid waste permit. Landfill design standards require that owners or operators minimize liquids admitted to or departing the active areas of the landfill. This is to be accomplished by designing the landfill to prevent run-on of all surface waters resulting from a maximum flow of a 25-year storm into the active area of the landfill and to collect and treat run-off of surface waters and other liquids from the active area of the landfill resulting from a 25-year storm (R315-303-3(1) UAC). Additionally, no new facility can be located in a floodplain unless the owner or operator demonstrates that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste so as to pose a hazard to human health or the environment (R315-302-1(2)(c)(ii) UAC).

The applicant was asked to provide additional information on flows in Browns Wash during storm events, and responded as follows.

The drainage area of Brown's Wash located upgradient from the Solitude Landfill site encompasses 27,930 acres (a map indicating this is now included in permit application). The estimated flow in Brown's Wash originating from a 100-year storm event was calculated using the TR-20 SCS method. The sheets included with the run-off information (now a part of the permit application) present the assumptions, input parameters, resulting hydrograph, and conclusions. Based on the input parameters used, the estimated peak flow from this storm event is 1,020 cubic feet per second (cfs). The calculated depth of flow of 3.46 ft will remain within the confines of the channel, which is approximately 5 ft deep. The peak velocity of 8.3 feet per second (fps) necessitates that some erosion control rip rap be place on the banks of the channel, near the northeast corner of Cell 1, extending approximately 30 to 50 feet on either side of the point of closest approach of the channel to the site boundary. The rip rap will serve to protect the corner of Cell 1 from undercutting. No other effects are anticipated from runoff in Brown's Wash.

**Comment**: The landfill is in a wildlife habitat area; burrowing ground owls live in the area.

**Response**: Similar comments were addressed in the April, 2003 Response to Comments document prepared after the public comment period for the Class I solid waste permit. The location standards for solid waste disposal facilities prohibit locating a landfill within wilderness or wilderness study areas and ecologically and scientifically significant natural areas including wildlife management areas and habitat for threatened or endangered species as designated pursuant to the Endangered Species Act of 1982 (R315-302-1(2)(a)(i) and (ii) UAC). The proposed landfill site meets these location standards. The applicant was asked to provide documentation or evidence that the site is not located in a habitat area for threatened or endangered species, and responded as follows.

This information is provided as a letter from the Utah Division of Wildlife Resources. This letter is included in Appendix F "Supporting Documentation" of the permit application. The letter, dated January 10, 2002, indicates that UDWR does not have records of occurrence for any threatened, endangered, or sensitive species in the area of the proposed landfill site. This information is based on data existing in the UDWR central database at the time of the request.

**Comment:** The proposed landfill site is near two canyons with that have significant rock art panels.

**Response:** The locations standards in the solid waste rules prohibit constructing a landfill near archeological sites where doing so would violate R315-302-1(2)(a)(vi) UAC. The landfill site is isolated and a significant distance from any canyons or archeological sites. The location of the landfill meets the siting requirements of the solid waste rules.

**Comment:** Waste should not be brought in from other states. Utah could become a "dumping station" for other states.

**Response:** The U.S. Supreme Court has determined that a complete ban on the importation of waste from other states is a violation of the commerce clause of the U.S. Constitution and is illegal. However, in accordance with current Utah law, Governor Leavitt and/or the Legislature may decide that a new commercial disposal facility is unnecessary or otherwise inappropriate. Any new Class V landfill which receives a solid waste permit must also obtain subsequent approval of the Governor and Legislature prior to construction of the landfill (UCA 19-6-108(3)(c)). The proposed Class V Solitude Landfill will require gubernatorial and legislative approvals. During this review process the Legislature and Governor Leavitt can consider issues outside of the environmental protection requirements covered in the Solid and Hazardous Waste Act and the solid waste rules.

**Comment:** Waste considered hazardous in other states but not in Utah could be accepted. **Response:** Some states are more stringent than the federal Resource Conservation and Recovery Act and Utah in defining hazardous waste. However, it is highly improbable that waste considered hazardous in another state would be disposed in the proposed landfill. The Solitude Class V permit prohibits accepting waste directly from industrial waste generators where such waste is likely to originate, as well as ash from incinerators with a design capacity of greater than 10 tons per day. In addition, state-specific hazardous waste likely would not become part of the municipal waste stream being sent to the landfill for disposal. However, the

Solitude Landfill may accept any waste that is considered nonhazardous by Utah statute and rules and that is allowed by the permit.

**Comment:** The landfill owners plan to expand the landfill eventually onto BLM land in Grand County or private land.

**Response:** For any expansion of the landfill area beyond the boundaries delineated in the original permit application a new application must be submitted for review, public comment, and approval or denial (R315-302-2(1)(a), R315-310-3 UAC), as well as review by the legislature and governor. The landfill owners have not provided any information that indicates they intend to expand beyond the facilities boundaries shown in the current permit application.

**Comment:** Was the sampling that was done for the geologic investigation sufficient for 320 acres? It has been awhile since the sampling was done; several earthquakes have occurred since then.

**Response:** Similar comments were addressed in the April, 2003 Response to Comments document prepared after the public comment period for the Class I solid waste permit. The sedimentary geology underling the site is quite uniform and of wide extent. The bedrock under the site, Mancos Shale, extends thousands of square miles throughout eastern Utah and western Colorado. The studies referenced in the application are the most recent available. Being several years old does not invalidate the studies or necessarily diminish their usefulness or accuracy. The studies used were of the usual type and age for a site evaluation.

Regarding earthquakes, the location standards in the solid waste rules prohibit locating a new landfill or lateral expansion of an existing landfill within 200 feet of a recently active (Holocene) fault without demonstrating that the landfill is designed to prevent damage to the structural integrity of the landfill. The proposed landfill is not within 200 feet of such a fault. The nearest Holocene fault is the Little Grand Fault, located 1¼ miles south of the site. The solid waste rules also prohibit locating a new or expanding facility in a seismic impact zone unless the owner or operator demonstrates that all containment structures are designed to resist the maximum horizontal acceleration at the site (R315-302-1(2)(b)(i) and (ii) UAC). A seismic impact zone is defined as an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. The technical review performed by the Division has determined that the proposed landfill is not in a seismic impact zone.

**Comment:** The waste disposed at the landfill will stay there forever.

**Response:** Landfills are located and designed to be permanent sites for the disposal of waste, although some landfills have been mined for reusable materials. The final cover of the landfill is designed to provide long-term stability and environmental protection, including minimizing infiltration. From bottom to top, it consists of 18 inches of low permeability (10<sup>-7</sup> cm/sec) compacted native clay, 24 inches of soil for frost protection, and 6 inches of coarse aggregate for erosion protection. Landfill owners are required to perform post-closure monitoring and maintenance of the cover for 30 years (R315-302-3(5) UAC), and to provide financial assurance for closure and post-closure activities (R315-309 UAC).